

- 12 -

C L A I M S

1. An assembly for use in a wellbore formed in an earth formation, comprising an expandable tubular element and an outer structure having first and second portions arranged at a distance from each other, said portions  
5 being restrained to the tubular element in a manner that said distance changes as a result of radial expansion of the tubular element, the outer structure further having a third portion arranged to move radially outward upon said change in distance between the first and second portions,  
10 wherein said radially outward movement of the third portion is larger than radially outward movement of the tubular element as a result of radial expansion of the tubular element.
2. The assembly of claim 1, wherein the third portion is  
15 arranged to move radially outward as a result of a decrease in distance between the first and second portions
3. The assembly of claim 1 or 2, wherein the third portion is arranged to move radially outward by virtue of  
20 radially outward bending of the third portion.
4. The assembly of any one of claims 1-3, wherein the tubular element is susceptible of axial shortening upon radial expansion thereof, and wherein said first and second portions of the outer structure are connected to  
25 the tubular element at respective locations axially spaced from each other.
5. The assembly of claim 4, wherein said first and second portions of the outer structure are welded to the

- 13 -

tubular element at said respective locations axially spaced from each other.

6. The assembly of claims 4 or 5, wherein said tubular element is an inner tubular element and the outer  
5 structure is an outer expandable tubular element arranged around the inner tubular element, and wherein the outer tubular element, when unrestrained from the inner tubular element, is susceptible to less axial shortening as a result of radial expansion than the inner tubular  
10 element.

7. The assembly of claim 6, wherein the outer tubular element is provided with a plurality of openings in the wall thereof, said openings overlapping each other in axial direction.

8. The assembly of claim 7, wherein said openings are slots provided in the wall of the outer expandable  
15 tubular element, the slots extending in substantially axial direction.

9. The assembly of any one of claims 6-8, wherein said  
20 first and second portions are the respective end portions of the outer tubular element.

10. The assembly of any one of claims 6-9, wherein an annular space is formed between the inner tubular element and the outer tubular element upon radial expansion of  
25 the inner tubular element, said space being filled with a fluidic compound.

11. The assembly of claim 10, wherein said space is filled with a hardenable fluidic compound.

12. The assembly of claim 11, wherein a flexible layer of  
30 sealing material is arranged around the outer tubular element.

- 14 -

13. The assembly of claim 4 or 5, wherein the outer structure includes at least one elongate member extending in axial direction of the tubular element.

5 14. The assembly of claim 13, wherein the outer structure includes a plurality of said elongate members regularly spaced along the circumference of the tubular element.

15. The assembly of claim 13 or 14, wherein each said elongate member is a metal bar.

10 16. The assembly substantially as described hereinbefore with reference to the drawings.